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## PATENT ABSTRACTS OF JAPAN

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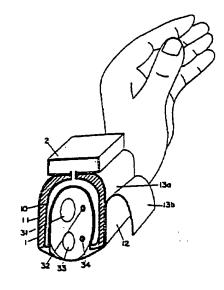
## (54) CUFF BAND OF WRIST TONOMETER

#### (57) Abstract:

PURPOSE: To facilitate fixing to a wrist by providing a blood checking part for constricting the ulnar artery and radial artery of a wrist, and installing a U-shaped clip plate interiorly.

CONSTITUTION: A body 2 with a display part and switch arranged on the surface is installed on a cuff band 1 consolidated. This cuff band 1 is equipped interiorly with a blood checking sack 10 located on the inner surface and a U-shaped clip plate 11 located on the outer surface and surrounding the blood checking sack 10, and a fitting piece 12 is extending at one end. When expanding, this blood checking sack 10 constricts the radial artery 32 on the radius 31 side situated inside the wrist and the ulnar artery 34 located on the ulna 33 side. The clip plate 11 is formed from plastics capable of elastic deformation, and the part of cuff band 1 where the blood checking sack 10 is fitted, is held in II-form

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# Specification

1. Title of the Invention

CUFF BAND OF WRIST SPHYGMOMANOMETER

## 2. Claim

- (1) A cuff band of a sphygmomanometer for pressing a radial artery and an ulnar artery of a wrist to measure a blood pressure, characterized in that said band has a blood checking section for pressing both said arteries, and includes therein a clip plate which has a U-shaped form and in which the width of an opening is substantially equivalent to the thickness of the wrist.
- 3. Detailed Description of the Invention [Industrial Field of Application]

The present invention relates to a cuff band of a wrist sphygmomanometer for measuring a blood pressure in a wrist. CCI -5 2000 CCI -5 200

# [Prior Art]

[Operation]

As for a sphygmomanometer provided so far, a cuff band thereof is attached to a brachium and a blood pressure is measured from a brachial artery.

[Problem to be Solved by the Invention]

In this case, upon attaching the cuff band, the user must extensively roll up a sleeve of his shirt or take off his shirt.

The invention is made in consideration of the problem and it is an object of the invention to provide a cuff band of a wrist sphygmomanometer whereby a blood pressure can be easily measured.

[Means for Solving the Problem]

The invention relates to a cuff band of a sphygmomanometer for pressing a radial artery and a ulnar artery of a wrist to measure a blood pressure, characterized in that the band has a blood checking section for pressing both the arteries, and includes therein a clip plate which has a U-shaped form and in which the width of an opening is substantially equivalent to the thickness of the wrist.

According to the invention, to measure a blood pressure in a wrist, it is unnecessary to extensively roll up a shirt. Further, the wrist is fitted into a clip plate, so that the attachment to the wrist can be easily performed.

[Embodiment]

The invention will now be described in detail hereinbelow on the basis of an illustrated embodiment. As shown in Fig. 2, a sphygmomanometer is constructed in such a manner that a main body 2 in which a blood pressure display unit 20 and a switch 21 are arranged on the surface thereof is integratedly attached to a cuff band 1. When the user attaches the cuff band 1 to his wrist, a blood pressure can be measured in a state in which his palm faces sideways. As obviously understood from Fig. 1, the cuff band 1 made of clothes or the like comprises a blood checking bag 10 located on the inner peripheral side and has therein a U-shaped clip plate 11 which is located on the outer peripheral side and which surrounds the blood checking bag 10. A fitting piece 12 is extended at one end of the band.

The above blood checking bag 10 is made of a material such as a rubber bag which is elastic and extendable. The clip plate 11 surrounding the blood checking bag 10 is also made of a synthetic resin which is elastic and can be deformed. The clip plate holds a portion, in which the blood checking bag 10 is provided for the cuff band 1, in a U-shaped form. Further, the opening width of the clip plate 11 is substantially equivalent to the thickness of the wrist. As for the attachment to the wrist, when the side surface of the wrist is slipped into the U-shaped portion of the cuff band 1, the cuff band 1 is properly fitted to the wrist due to the elastic properties of the clip plate 11. The above-mentioned main body 2 is coupled to the clip plate 11, thereby being attached to the cuff band 1.

To the inner surface of the fitting piece 12 at the one end of the cuff band 1, a plane fastener 13b, which pairs with a plane fastener 13a arranged on the outer surface of the other end of the cuff band

1, is attached. As mentioned above, the cuff band 1 is fitted to the wrist by using the elastic properties of the clip plate 11 and, after that, the fitting piece 12 is further wrapped around the wrist to connect the plane fasteners 13a and 13b to each other, thereby completing the attachment of the cuff band 1 to the wrist.

In this instance, the above-mentioned blood checking bag 10 has such a size that when the bag is expanded, it can press both of a radial artery 32 located on a radius 31 side and an ulnar artery 34 on an ulna 33 side in the wrist from the front and rear surfaces and one side surface of the wrist. At that time, the blood checking bag 10 surely transmits a pressure upon expansion to the wrist due to the clip plate 11 provided on the outer peripheral side.

When the cuff band 1 is attached to the wrist in this manner, the main body 2 having the display unit 20 as mentioned above is constructed in such a manner that when the palm faces sideways, the main body faces upward. Accordingly, even when the user does not twist his arm so that the palm faces upward, he can read a blood pressure value.

The embodiment in which the main body 2 of the sphygmomanometer is integratedly attached to the cuff band 1 has been illustrated here. It is obvious that the invention is not limited to it.

[Effects of the Invention]

As mentioned above, the cuff band according to the invention is attached to the wrist to press the radial artery and the ulnar artery. Upon measuring the blood pressure, it is unnecessary to extensively roll up the shirt. Further, the U-shaped clip plate provided for the cuff band permits the cuff band to maintain such a form that fitting to the wrist can be easily made, so that the band can be attached to

the wrist with a single motion. Accordingly, the attachment to the wrist can be also easily performed.

# 4. Brief Description of the Drawings

Fig. 1 is an exploded perspective view of an embodiment of the invention and Fig. 2 is a perspective view thereof. Reference numeral 1 denotes a cuff band; 2 a main body; 10 a blood checking bag; and 11 a clip plate.

